

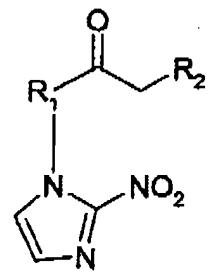
Specification

Please replace the paragraph at page 5, line 12 with the amended paragraph below:

The present invention concerns the preparation of original sulphur-containing precursors as a first intermediate allowing the direct radiolabelling of perfluoroalkyl groups (-CF₃, -CF₂) by [¹⁸F] on substrates equipped with nitrogen-containing functions. This first intermediate is an amino acid derivative which is N-protected by an imido group, e.g., a phthalimido group, or by a synthetically equivalent group and wherein the carboxyl function has been transformed into a dithioester function or a synthetically equivalent persulphurated moiety, obtainable by (a) to (g) of the invention defined in claims 10, 11, 12 and 13. The present invention also concerns the [¹⁸F]-labelled perfluorinated second intermediate, as defined in claims 14, 15, 16 and 17 which is a perfluorinated amino acid derivative which is N-protected by an imido group, e.g., a phthalimido group, or a synthetically equivalent group obtainable by (a) to (h) of the invention and the [¹⁸F]-labelled perfluorinated third and last intermediate having the formula of a perfluoropropylamine as defined in claims 18, 19, and 20.

Please replace the paragraph at the bottom of page 5 bridging page 6 at line 29 with the amended paragraph below:

According to a first aspect the invention relates to novel [¹⁸F]-radiolabelled compounds having the formula :



wherein R₁ is Ch₂ and R₂ is an alkyl group having up to about 6 halogen atoms, wherein said alkyl group has the formula CHXCX₂CY₃ where X is halogen or hydrogen and Y is fluorine, e.g., having specific radioactivity of the d comprised between 1 and 30 Ci/mmol, preferably between 1 and 20 Ci/mmol, preferably between 1 and 10 Ci/mmol. Such compounds, e.g., have the formula 2-(2-nitro-1H-imidazol-1-yl)-N-(3,3,3-trifluoropropyl) acetamide ([¹⁸F]-EF3) or 2(2-nitro-1H-imidazol-1-yl)-N-(2,2,3,3,3-pentafluoropropyl) acetamide ([¹⁸F]-EF5) as recited in claims 1-4.